

1. Explain why the result (answer) is positive or negative.

a) $\frac{2}{-3} \times \frac{1}{2}$ b) $\frac{8}{-5} \times (\frac{-4}{-11})$ c) $\frac{-4}{7} \times (\frac{-2}{3})$ d) $-1\frac{2}{3} \times (\frac{-5}{6})$

$\frac{2}{-6} = \frac{-1}{3}$	$\frac{-32}{55} = \frac{-32}{55}$	$\frac{8}{21}$	$\frac{-5}{3} \times (\frac{-5}{6})$ $\frac{25}{18} = 1\frac{7}{18}$
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e) $\frac{-7}{8} \times (\frac{3}{-6}) \times (\frac{-5}{6})$

$\frac{105}{-288} = \frac{-35}{96}$

2. Find the product

a) $\frac{5}{6} \times (\frac{-8}{8})$ b) $\frac{3}{5} \times (\frac{-4}{7})$ c) $\frac{-1}{8} \times (\frac{-3}{7})$ d) $\frac{1}{-6} \times (\frac{-5}{-3})$

$\frac{-40}{48} = \frac{-5}{6}$	$\frac{-12}{35}$	$\frac{3}{56}$	$\frac{-5}{18}$
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e) $\frac{3}{-4} \times (\frac{-8}{9})$ f) $\frac{-7}{11} \times (-1\frac{4}{7})$

$\frac{-24}{-36} = \frac{6}{9} = \frac{2}{3}$	$\frac{-7}{11} \times (\frac{-11}{7}) = 1$
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3. Will the result be positive or negative? Solve.

a) $\frac{-2}{3} \times \left(\frac{6}{-7}\right)$ b) $\frac{-3}{-8} \times \left(\frac{-11}{12}\right)$ c) $-5\frac{1}{3} \times \frac{4}{5}$ d) $\frac{4}{-9} \times \left(\frac{-21}{10}\right) \times \left(\frac{-3}{10}\right)$

$\frac{12}{21} = \frac{4}{7}$	$\frac{33}{-96} = \frac{-11}{32}$	$\frac{-16}{3} \times \frac{4}{5}$ $\frac{-64}{15} = -4\frac{4}{15}$	$\frac{252}{-900} = \frac{-42}{150} = \frac{-21}{75} = \frac{-7}{25}$
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4. When a raccoon goes into hibernation, its heart rate falls $4\frac{1}{2}$ beats per hour for $7\frac{1}{3}$ h. What is the total change in the raccoon's heart rate during that time?

$-4\frac{1}{2} \times \left(7\frac{1}{3}\right) = \frac{-9}{2} \times \frac{22}{3} = \frac{-198}{6} = -33$
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5. Petra's pulse rate during exercise was 27 beats in 12 s. After $7\frac{1}{2}$ minute rest, her pulse rate was 20 beats in 15 seconds.

- What was her pulse rate in beats per minute during exercise?
- What was her pulse rate in beats per minute after a rest?
- Find the change in her pulse rate per minute if it dropped the same amount per minute.

$27 \times 5 = 135$ beats	$20 \times 4 = 80$ beats	$135 - 80 = 55$ beats
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